## REMARKS

Rejection Under 35 U.S.C. § 103

Reconsideration and allowance of the subject application are respectfully requested.

Claims Status

Claims 1-5, 7-22, and 28-31 are pending. The independent claims are 1, 28, and 30.

Claims 1 and 30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411). Claims 1 and 30 specifically recite a "**thermally conductive** non-flat substrate surface" that provides support for the silk-screened dielectric layer applied on said substrate surface that is followed by a resistive layer applied on said dielectric layer thereby forming a circuit for the generation of heat, the resistive layer having at least one resistive trace made of thick film ink in a pattern that is discontinuous circumferentially. In marked contrast, Bresolin et al. requires that: "In particular, the resistive component is formed by an electrically insulating **heat-resistant** flexible laminar **support 15** that is made for example of Mylar or Kevlar (Registered Trademarks) and is a few tenths of a millimeter thick; a layer 16 of an electrically resistive material is anchored to the support by virtue of the screen printing process that is normally used for printed circuits" (Column 4, Lines 13-19). **Therefore, the substrate surface recited in Claims 1 and 30 requires thermal conductivity while Bresolin et al. requires the exact opposite which is that it must be heat-resistant.**

The component in Bresolin et al. indicated by numeral 22 is "...a backing layer 22 is deposited first on the support 15. This layer is made of a material that has high heat conductivity and is **electrically insulating**, and has the purpose of producing a uniform temperature distribution in the resistive layer 16 that is deposited thereon" (Column 4, Lines 54-57). **Therefore, this material is the dielectric layer.** Layer 16 is not a dielectric layer, as stated in the Office Action, but is "...an **electrically resistive material** is anchored to the support by virtue of the screen printing process that is normally used for printed circuits" (Column 4, Lines 16-18). "The layer 16, whose thickness is similar to, or lower than, the thickness of the support 15, is arranged in preset regions, for example so as to form bands 17 of appropriate width so as to form a certain number of resistors that are parallel-connected to

electrically conducting paths 18 made of silver ink. The paths 18 have connectors 19 and 20 for connection to the terminals 13 and 14 of the thermostat" (Column 4, Lines 22-28). Therefore, it is respectfully believed that the layer 16 disclosed in Bresolin et al. clearly corresponds to a resistance layer and the bands 17 clearly comport with the at least one resistive trace as recited in Claims 1 and 30. It is respectfully believed that layer 16 does not correspond to the dielectric layer and the bands do not correspond to the resistive layer as stated in the Office Action.

Therefore, the prior art teaches away by stipulating that there must be a **heat-resistant** flexible laminar support 15 from the Applicants' Claimed Invention that requires a "**thermally conductive** non-flat substrate surface." The Supreme Court held in U.S. v. Adams, 383 U.S. 39, 148 U.S.P.Q. 479 (1966), that one important indicium of nonobviousness is "teaching away" from the claimed invention by the prior art or by experts in the art at (and/or after) the time the invention was made. This is specifically mandated by the Manual of Patent Examining Procedure (M.P.E.P.) §2141.02 that recites: "A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention." W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 U.S.P.Q. 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984)."

It is well established in U.S. Patent Law as well as the Manual for Patent Examining Procedure (M.P.E.P.) §2143.03 that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). In this case, the limitation regarding the "**thermally conductive** non-flat substrate surface" is not found in Bresolin et al. that requires a **heat-resistant** flexible laminar support. Moreover, when evaluating a claim for obviousness, all claim limitations must be considered. In re Evanega, 829 F.2d 1110, 4 U.S.P.Q. 2d 1249 (Fed. Cir. 1987).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit

showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000). See also In re Lee, 277 F.3d 1338, 1342-44, 61 U.S.P.Q.2d 1430, 1433-34 (Fed. Cir. 2002) (discussing the importance of relying on objective evidence and making specific factual findings with respect to the motivation to modify or combine references); In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

Moreover, if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). In this case, the substrate 34 disclosed in the Applicants' Patent Specification "...is sized smaller than the outside diameter of the hot runner nozzle. This configuration provides good thermal communication between the heater assembly 12 and the nozzle body 14" (Page 13, Lines 1-4 of Applicants' Patent Application) while Bresolin et al. requires: "...said heating component being arranged in a substantially torus-like gap formed between said thermostat and the inside surface of said container and being radially offset and longitudinally superimposed to said thermostat..." (Claim 1, Column 5, Lines 42-46). Therefore, the gap required in Bresolin et al. precludes the thermal conductivity required by the Applicants' Invention as claimed. If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

For the foregoing reasons, the Applicants respectfully request that the rejection of Claims 1 and 30 be withdrawn and it is respectfully believed that the rejection under 35 U.S.C. § 103(a) over Bresolin et al. is overcome.

Moreover, Claims 2, 5, 7-9, 16-21 and 31 were also rejected under 35 U.S.C. § 103(a) over Bresolin et al. Since Claims 2, 5, 7-9, 16-21 and 31 depend from and contain all of the limitations of Claim 1 and Claim 30, Claims 2, 5, 7-9, 16-21 and 31 are felt to distinguish over Bresolin et al. in the same manner as Claim 1 and Claim 30. Therefore, Claims 1, 2, 5, 7-9, 16-21, 30 and 31 overcome the rejection under 35 U.S.C. § 103.

Claims 3, 4 and 15 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411) as applied to Claims 1, 2, 5, 7-9 and 16-21 above and further in view of Schwarzkopf (U.S. Patent No. 6,025,577) and Claim 28 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411) and further in view of Schwarzkopf (U.S. Patent No. 6,025,577).

Claims 3, 4 and 15 are all dependent claims that depend from Claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is also nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Moreover, it is respectfully believed that Claims 3, 4 and 15 overcome Bresolin et al. in the same manner as Claims 1, 2, 5, 7-9 and 9-16 above.

Moreover, Bresolin et al. is directed to a "Compact Immersion Heater, Particularly for Aquariums." Therefore, the heater needs a heating component to be "at least partially curled around said thermostat so as to face the inside cylindrical surface of said container" (Claim 1, Column 5, Lines 46-48). A cylindrical structure will destroy Bresolin et al. for its stated purpose since an aquarium heater should not radiate heat from the side of the heater that is adjacent to an outside glass wall of the aquarium. This could cause the temperature of the glass wall to heat-up and potentially break and would not provide a significant help in heating the water of the aquarium. This is specifically recited in Bresolin et al.: "Another drawback is the fact that the resistor operates at high temperature and therefore cannot be placed **directly in contact with the glass to prevent breakages caused by thermal shock and in order to comply with safety rules**, which mandate double electric and thermal insulation" (Column 2, Lines 35-39). A specific purpose of Bresolin et al. is to overcome the prior art that precluded the ability to place the heater next to the glass wall of the aquarium by reciting: "The electric resistor is kept at a certain distance from the glass wall of the test-tube, generally more than a millimeter, in order to protect it against thermal shocks and to comply with safety rules regarding electrical devices in contact with liquids (Column 1, Lines 30-34).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). In this case, Bresolin et al. makes it very clear that the proposed changes found in Schwarzkopf would be

very undesirable. Therefore, it is respectfully believed that if the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984). Moreover, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 U.S.P.Q. 349 (CCPA 1959).

In summary, when applying 35 U.S.C. § 103, the following tenets of patent law must be adhered to:

(a) The claimed invention must be considered as a whole;

(b) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(c) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(d) Reasonable expectation of success is the standard with which obviousness is determined. Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 U.S.P.Q. 182, 187 n.5 (Fed. Cir. 1986) and the Manual for Patent Examining Procedure (MPEP) §2141. In this case, the modification of the aquarium heater disclosed in Bresolin et al. with the cylindrical heater and slot of Schwarzkopf would be very undesirable and it is only with hindsight based on the Applicants' Patent Application would this modification occur. Moreover, Bresolin et al. specifically would direct a person skilled in the art not to make this modification found in Schwartzkopf since the breaking of the aquarium glass would not only be undesirable but a complete disaster.

For the foregoing reasons, the Applicants respectfully request that the rejection of Claims 3, 4, 15 and 28 be withdrawn and it is respectfully believed that the rejection of Claims 3, 4 and 15 under 35 U.S.C. § 103(a) over Bresolin et al. as applied to Claims 1, 2, 5, 7-9 and 16-21 above and further in view of Schwarzkopf is overcome and the rejection of Claim 28 under 35 U.S.C. § 103(a) over Bresolin et al. in view of Schwarzkopf is overcome.

Moreover, Claim 29 was also rejected under 35 U.S.C. § 103(a) over Bresolin et al. in view of Schwarzkopf. Since Claim 29 depends from and contains all of the limitations of Claim 28, Claim 29 is felt to distinguish over Bresolin et al. in view of Schwarzkopf in the

same manner as Claim 28. Therefore, Claims 3, 4, 15, 28 and 29 overcome the rejection under 35 U.S.C. § 103.

Claims 14 and 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411) as applied to Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above and further in view of Riley (U.S. Patent No. 5,702,653). Claims 14 and 22 are all dependent claims that depend from Claim 2, which depends from independent Claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is also nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Moreover, it is respectfully believed that Claims 14 and 22 overcome Bresolin et al. in the same manner as Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above.

Although, Bresolin et al. recites: "The paths 18 have connectors 19 and 20 for connection to the terminals 13 and 14 of the thermostat" (Column 4, Lines 27-28), Bresolin et al. does not recite a "connector housing" **for connection to each of the contact pads**. The Applicants' Patent Application shows a connector sleeve 18 in FIGS. 1, 4 and 5, which is described on Page 12, Lines 13-16 and Page 16, Lines 19-32 and Page 17, Lines 1-23.

Riley discloses gold contacts and a ceramic substrate for a "...thick-film switch element includes a high-temperature glass frit fused to a non-conductive substrate" (Abstract, Lines 1-2). There is not the slightest hint or suggestion as why these features should be extracted from this reference and combined with Bresolin et al. In this case, neither cited reference discloses the use of a connector housing and it is axiomatic that when this feature is not disclosed in either reference that the combination of these references cannot result in the claimed invention. It is well established in U.S. Patent Law as well as the Manual for Patent Examining Procedure (M.P.E.P.) Section 2143.03 that to establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). In this specific instance, the limitation regarding a "connector housing" is not taught or suggested by the cited prior art.

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to

make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). In this case, there is not the slightest hint or suggestion to take a ceramic substrate and gold contacts from Riley and modify Bresolin et al. accordingly. Moreover, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). In this case, Riley has nothing to do with the flow of molten plastic and the thermal issues associated therewith.

For the foregoing reasons, the Applicants respectfully request that the rejection of Claims 14 and 22 be withdrawn and it is respectfully believed that the rejection of Claims 14 and 22 under 35 U.S.C. § 103(a) over Bresolin et al. as applied to Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above and further in view of Riley is overcome.

Claims 10, 11 and 12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411) as applied to Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above and further in view of Osuna-Diaz et al. (U.S. Patent No. 4,787,836). Claims 10, 11 and 12 are all dependent claims that depend from Claim 2, which depends from independent Claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is also nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Moreover, it is respectfully believed that Claims 10, 11 and 12 overcome Bresolin et al. in the same manner as Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above.

Claims 10, 11 and 12 require a "locking detent." A locking detent is defined by the Applicants as follows: "The detent assembly 38 comprises a detent spring 46 and a detent pin 44. When the housing 36 is installed on the heater assembly 12, the detent pin 44 is aligned and communicates with the locating hole 30. This alignment automatically occurs when the key 42 engages the slot 24 of the heater assembly 12. The detent spring 46 is made from a sheet material that exhibits spring like characteristics that can withstand the high temperatures of the molding process. In the preferred embodiment the detent spring 46 is made from type 301 stainless steel. As the connector sleeve assembly 18 is slid down the heater assembly 12, the detent pin 44 is sized to engage the locating hole 30 and effectively locks the connector sleeve assembly 18 onto the heater assembly 12 in the proper location

and insures the alignment and communication of electrical current through the spring contacts 40 and the contact pads 35" (Applicants' Patent Specification, Page 18, Lines 6-21).

In marked contrast, Osuna-Diaz et al. is cited by the Examiner for "teaching a threading that locks the heater into place in relation to the nozzle." It is respectfully believed that there is no locking function disclosed. There is only the heater being threaded against the nozzle. Under the doctrine of equivalents requires the product or process to contain elements identical or equivalent to each element of the claimed invention. Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17, 117 S.Ct. 1040, 1049, 137 L.Ed.2d 146 (1997). Two primary approaches have been used for determining equivalents: the "triple identity" approach and the "insubstantial differences" approach. The "triple identity" approach focuses on "the underlying function served by a particular claim element, the underlying way that element serves that function and underlying result thus obtained by that element." Id. The "insubstantial differences" approach focuses on "whether the substitute element plays a role substantially different from the claimed element." Id. In this case, the use of a detent spring that engages a pin into a hole for locking is a marked difference to a threaded cap with regard to the way the item is engaged with essentially a different function and result. The role of a spring loaded pin provides a quick release that plays a very different role than a screw cap that requires a time consuming process to completely rotate a cap three-hundred and sixty degrees (360°) numerous times so that the differences are both apparent and significant.

It was explicitly held in In re Sang Sung Lee, 61 U.S.P.Q.2d 1430 (C.A.F.C. 2002) that the "Board of Patent Appeals and Interferences improperly relied upon "common knowledge and common sense" of person of ordinary skill in the art to find the invention of the patent application obvious over combination of two prior art references, since a factual question of motivation to select and combine references is material to patentability, and could not be resolved on subjective belief and unknown authority, since deferential review of agency decisions under Administrative Procedure Act reinforces obligation of board to develop evidentiary basis for its findings, since board's rejection of need for any specific hint or suggestion in particular reference to support combination constituted omission of relevant factor required by precedent, and thus was both legal error and arbitrary agency action, since board's findings must extend to all material facts and be documented on record, and since

"common knowledge and common sense" are not specialized knowledge and expertise of agency contemplated by APA, and may not be substituted for evidence, although they may be applied to analysis of evidence." Also, In re Sang Sung Lee recites: "Rejection of patent application for obviousness under 35 U.S.C. § 103 must be based on evidence comprehended by language of that section, and search for and analysis of prior art includes evidence relevant to finding of whether there is teaching, motivation, or suggestion to select and combine references relied on as evidence of obviousness; factual inquiry whether to combine references must be thorough and searching, based on objective evidence of record, and Board of Patent Appeals and Interferences must explain reasons why one of ordinary skill in art would have been motivated to select references and to combine them to render claimed invention obvious." In this case, it is respectfully believed that there is no objective evidence of record that would lead an individual of ordinary skill in the art to view a threaded cap and then determine a completely different structure of a locking detent utilizing a spring-loaded pin to engage a hole could be substituted without the slightest hint or suggestion on record for making this type of substitution. "In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). There is nothing disclosed regarding a locking detent and not the slightest hint or suggestion as to why this claimed feature should or can be created.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000); In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); and In re Jones, 958 F.2d 347, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992).

For the foregoing reasons, the Applicants respectfully request that the rejection of Claims 10, 11 and 12 be withdrawn and it is respectfully believed that the rejection under 35 U.S.C. § 103(a) over Bresolin et al., as applied to Claims 1, 2, 5, 7-9, 16-21, 30 and 31 above and further in view of Osuna-Diaz et al. is overcome.

Claim 13 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Bresolin et al. (U.S. Patent No. 5,859,411) in view of Schwarzkopf (U.S. Patent No. 6,025,577) as applied to Claims 3, 4 and 15 above, and further in view of Godwin (EP 0963829 A1). Claim 13 is a dependent claim that depends from Claim 2, which depends from independent Claim 1. If an independent claim is nonobvious under 35 U.S.C. § 103(a), then any claim depending therefrom is also nonobvious. In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Moreover, it is respectfully believed that Claim 13 overcomes Bresolin et al. in view of Schwarzkopf the same manner as Claims 3, 4 and 15 above.

Godwin recites: "Figs. 14(a) and 14(b) show preferred means for removably attaching a thin film heater to either the outside or the inside of a hot runner nozzle, respectively. The thin film heater is deposited on a flexible thin, band substrate that may display spring-like characteristics. A thin film heater attached in this manner may be easily replaced in the event of a failure. In Fig. 14(a), thin film heater 132 is disposed outside of nozzle 130 and may comprise, for example, electrically insulated layer 132, electrically conductive layer 134, and electrically insulated layer 136. A connector 138 fits within a channel of the nozzle 130 and restrains the two ends of the resilient heater 132. Such construction can provide localized heat to the resin and melt channel 139. In Fig. 14(b), the heater 132 is disposed inside nozzle 130 and may also comprise the layers 132, 134, and 136. A wear layer (now shown) can also be provided between layer 132 and the melt channel 139 to present wear on the heater 132" (Paragraph 0043, Lines 1-9). Therefore, although a thin film heater is shown with a connector to hold the various layers in position, what is not shown is the limitations of Claim 13 that recites: "...said connector housing further comprises a key for slidably engaging a longitudinal slot in said substrate, thereby aligning radially said contacts with said contact pads." In this situation, Godwin does not disclose a connector housing and does not disclose contact pads. It is respectfully believed to be improper to take a key and slot from Godwin and without any hint or suggestion attempt to combine this with Bresolin et al. and Schwarzkopf. The mere fact that references can be

combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). A statement that modifications of the prior art to meet the claimed invention would have been "'well within the ordinary skill of the art at the time the claimed invention was made'" because the references relied upon teaching that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993). See also In re Kotzab, 217 F.3d 1365, 1371, 55 U.S.P.Q.2d 1313, 1318 (Fed. Cir. 2000).

It is submitted that the combination of references is obtained only by impermissible hindsight reconstruction using Applicants' patent application. The Supreme Court of the United States specifically cautioned against using hindsight in Graham et al. v. John Deere Company, 148 U.S.P.Q. 459 (1966).

For the foregoing reasons, the Applicants respectfully request that the rejection of Claim 13 be withdrawn and it is respectfully believed that the rejection under 35 U.S.C. § 103(a) over Bresolin et al. in view of Schwarzkopf, as applied to Claims 3, 4 and 15 above, and further in view of Godwin is overcome.

Claims 7, 8, 11, 14, 20 and 21 are amended utilizing the same terminology from a method-type claim to provide structure-type claims as so helpfully suggested by the Examiner so that the limitations can be considered for the purposes of patentability. Also, the Applicants' Patent Specification has been amended to clean-up numerous typographical errors regarding reference numerals and language. In the same manner, Fig. 9 is amended to correctly reference the contact pads by numeral 52 rather than numeral 34. No new matter has been added.

In view of the above, it is submitted that the claims in this application are allowable, and an early notice of allowance is solicited. If a telephone interview would facilitate this matter, the Examiner is invited to contact the undersigned.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 625-3507. All correspondence should continue to be directed to our address given below.

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